

Montana DEQ Forest Fire Smoke Advisory

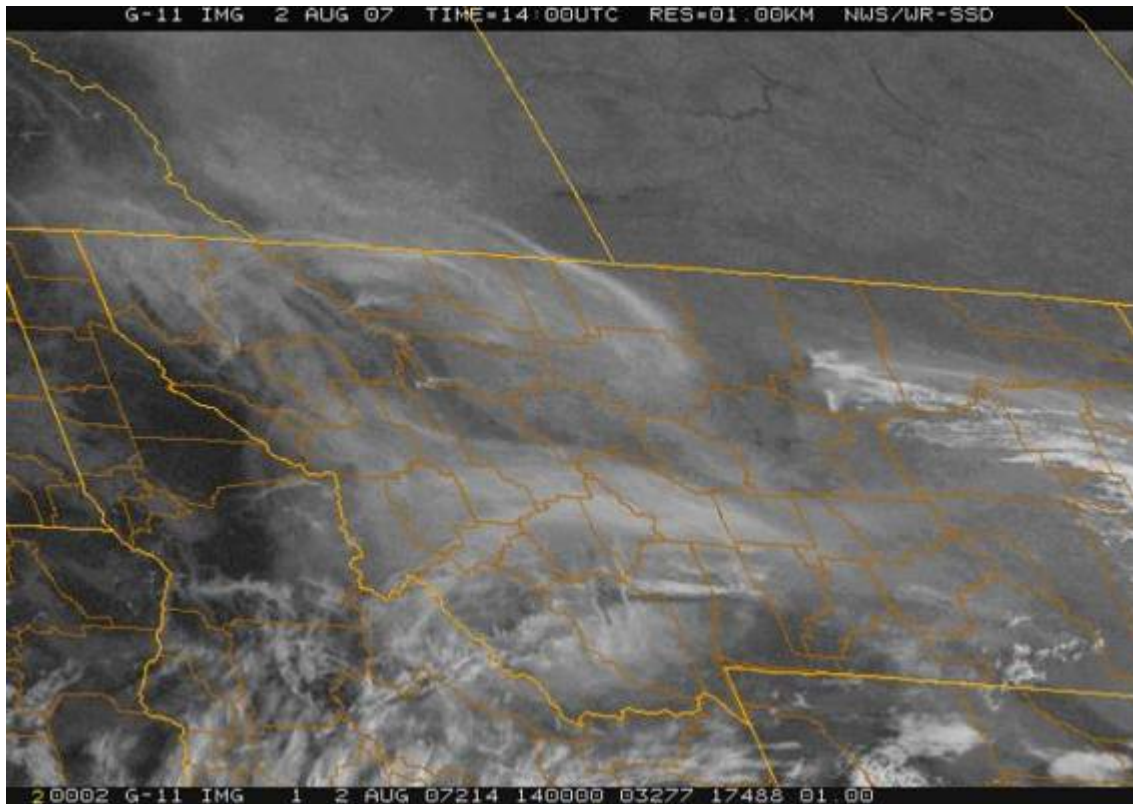
August 02 2007

10:00 AM Thursday

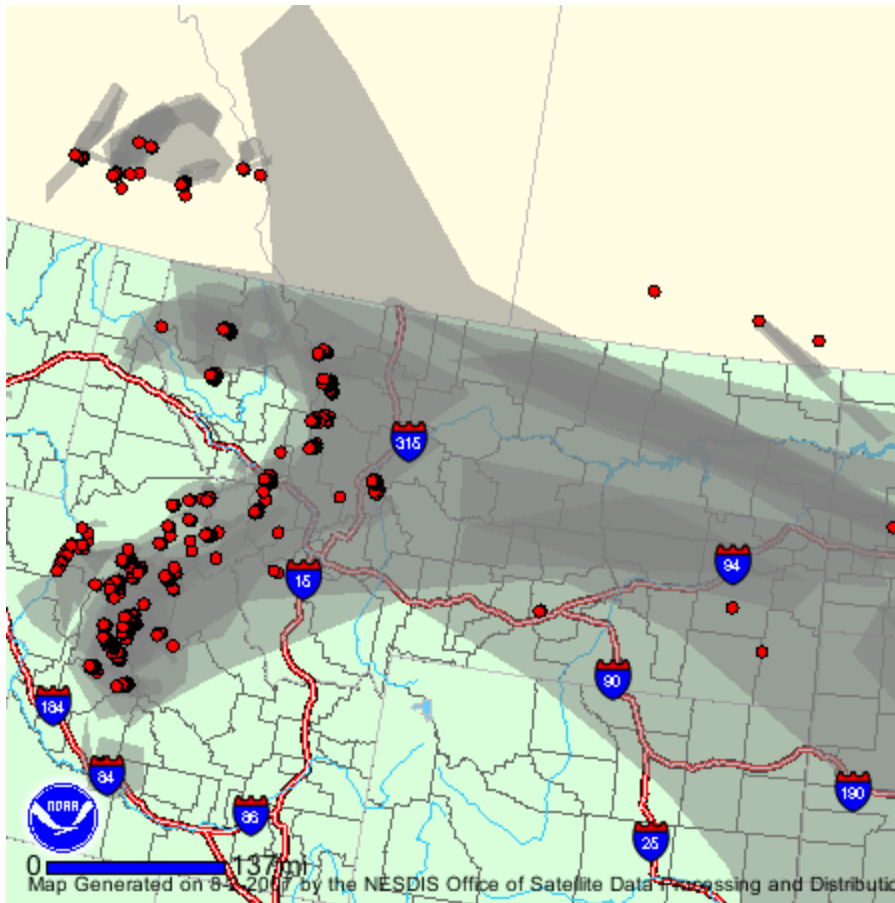
Current Situation

Very high levels of smoke are trapped in the valleys of western Montana this morning. [UNHEALTHY](#) levels are currently being recorded in Whitefish, Kalispell, Missoula and Butte. Smoke is also impacting eastern Montana intermittently. Sidney recorded about 3 hours of heavy smoke impacts early this morning that put them in [UNHEALTHY](#) temporarily. Polson, Ronan and Helena are currently at [UNHEALTHY FOR SENSITIVE](#) and although Libby and Hamilton are still hanging on to [MODERATE](#) ratings early, they will likely end up there as well. Smoke levels will rise during the morning as the day heats up in most areas before thinning out somewhat this afternoon. Direct smoke impacts in the areas near the active fires, especially in the Clark Fork valley near the Mile Marker 124 fire are expected to be [UNHEALTHY](#) or worse today. See the forecast below for details. Residents near active fires or experiencing noticeable smoke levels should use the [VISIBILITY GUIDELINES](#) to determine smoke levels in their area and guide their activity decisions.

Morning satellite photo centered on Great Falls:



This morning's analysis from NOAA's satellite services division shows the active fires in Montana and the smoke plumes combining and spreading downwind (the analyzed smoke is based on yesterday's satellite coverage, the fire detects are based on last night's satellite coverage)

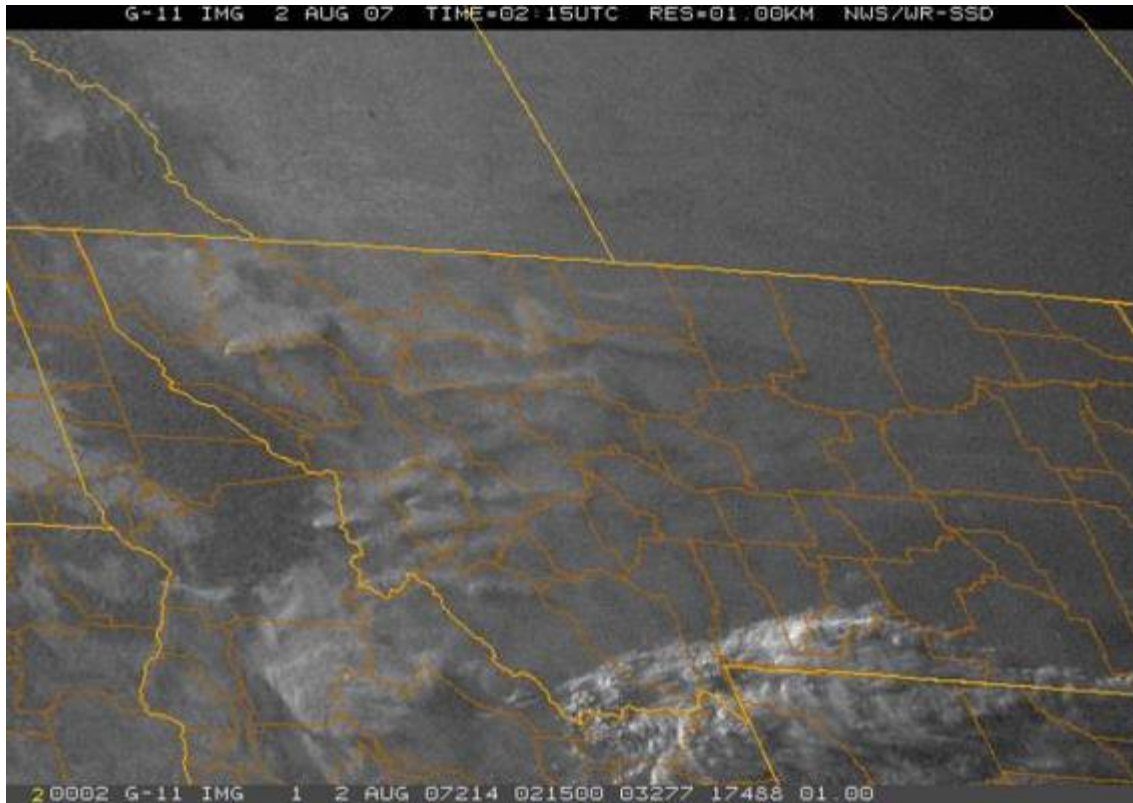


Red indicates hot spot detected. Grey represents smoke seen by satellite.
Fire size is exaggerated for visibility at this scale

To identify individual fires on graphic above go here:

http://activefiremaps.fs.fed.us/lg_fire2.php

This satellite photo below was taken last night at 8:15 PM clearly shows the many plumes of smoke stretching out from the active fires in Idaho and Montana.



The smoke is structured in layers as plumes from different fire episodes settle in to their final plume heights. This can produce dramatic sunsets like this one from August 1 that put stripes across the face of the sun. (Photo by Candace Coefield)



Real time particulate information is currently available in most of the larger urban areas from several different sources including: DEQ run PM-10 BAMS and PM2.5 BAMS, NWS ASOS visibility monitors, and USFS remote access Nephelometers and BAMS.

This morning's smoke report is below, comparing particulate levels where we have information to MDEQ's Forest Fire health advisory levels.

Updated 10 AM August 02, 2007

Locations and severity of forest fire smoke reports since midnight of the date above at reporting stations.

<u>HAZARDOUS</u>	
<u>VERY UNHEALTHY</u>	
<u>UNHEALTHY</u>	Whitefish T24 Kalispell T24 Missoula T24 Butte T24 Sidney Vis(3)
<u>UNHEALTHY FOR SENSITIVE GROUPS</u>	Polson T24 Ronan T24 Helena T24
<u>MODERATE</u>	Libby T24 Hamilton T24 Dillon Vis (3)

T1(x) One-hour TEOM or BAM value (number of values)
 T8(x) Eight-hour average TEOM or BAM value(number of values)
 T24 24 hour average TEOM or BAM value
 Vis(x) Visibility value(number of hours)
 Vis(am/pm) Visibility value from twice/day reporting stations
 (est) estimate

Local impacts in areas immediately adjacent to active fires are expected to exceed some or all of the advisory levels. DEQ recommends the use of local [visibility guidelines](#) to evaluate possible health risks and make informed activity decisions.

Forecast

High pressure will remain over the state today and only modest improvement in the trapped smoke conditions are expected this afternoon. For the morning, smoke impacts could rise sharply for a few hours in the valleys that do not currently have direct fire impacts. With no coherent transport winds today, most of the smoke will be hanging around through tomorrow for continued very smoky conditions west of the divide and intermittent smoke intrusion east of the divide. Smoke at [UNHEALTHY FOR SENSITIVE](#) levels or worse will be occurring in many communities until about 1 or 2

this afternoon. Smoke levels under the thickest parts of the plume aloft could reach [UNHEALTHY](#). Direct plume impacts will be problem today for many areas. Residents need to pay close attention to conditions in their area and use the [visibility guidelines](#) to guide their activity decisions as the situation changes.

[John Coefield](#)

Meteorologist

Montana Department of Environmental Quality